

THE SCOPE

*Immediate, apparently insurmountable problems soon become memories
of conquered tasks.*

Editor

Articles by

HAROLD GREELEY NOYES
BERNARD E. VODNOY
CLINTON L. WILSON, Jr.
HENRY FINE
QUINN and GATES
ARTHUR VEANER and ROBERT LIPPIN
IRVING GREENBLAT
HERBERT IVENTASH
SID NEWMAN
MARSHALL V. MARGOLSKEE

February 1942

THE SCOPE



Published by the Students of the Massachusetts School of Optometry

Boston, Massachusetts



Yours For Tomorrow

OPTOMETRY THE PROFESSION

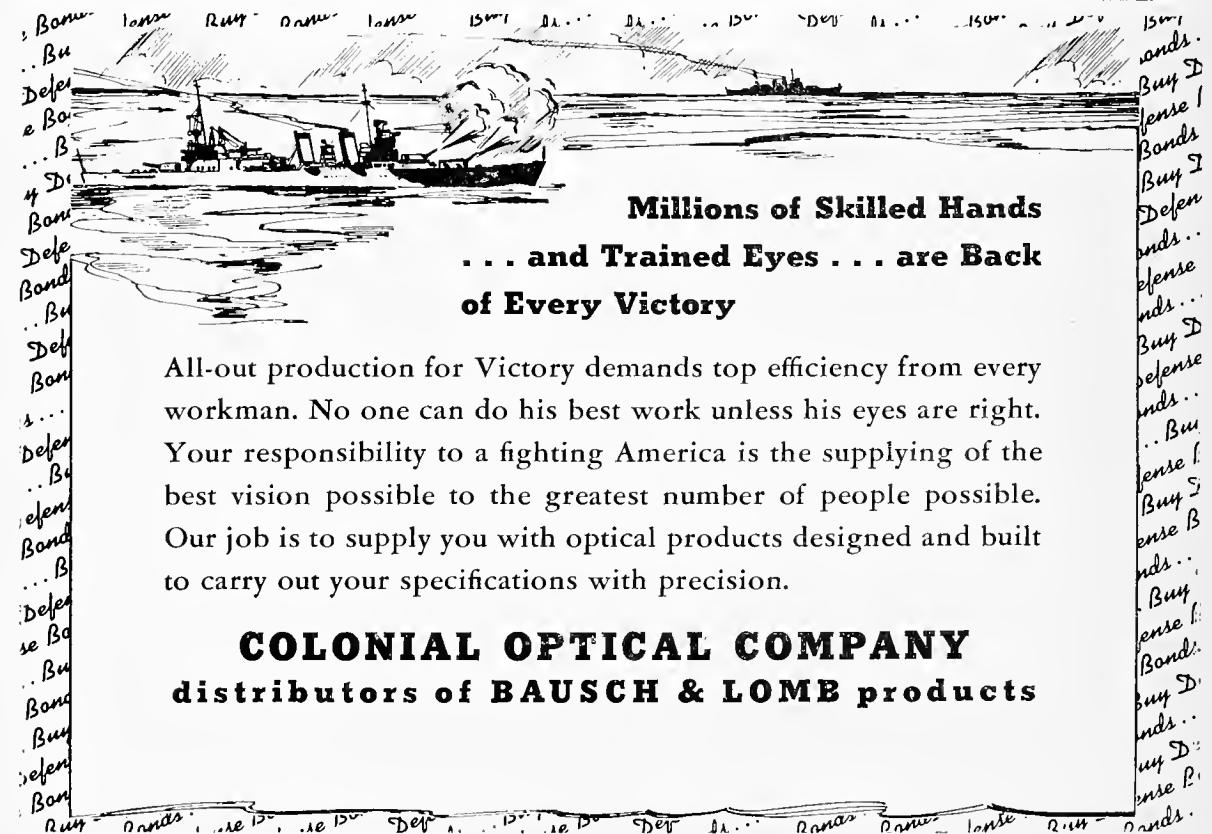
Optometry is to be your story . . . your life . . . your profession. As you tell it, live it, conduct it . . . so will it grow in stature in the eyes of those you serve.

"The American Optical Company recognizes that while it is not and cannot be a part of the professions, it is so closely related to and dependent on the profes-

sions that its success can be regulated almost entirely by its standing with and the progress of the professions. AO's function consists of supplying the best materials at reasonable costs and under such conditions as will foster and promote the objective of 'Optometry as a Profession'." —From the AMERICAN Plan

—From the AMERICAN Plan

American Optical Company



**Millions of Skilled Hands
... and Trained Eyes ... are Back
of Every Victory**

All-out production for Victory demands top efficiency from every workman. No one can do his best work unless his eyes are right. Your responsibility to a fighting America is the supplying of the best vision possible to the greatest number of people possible. Our job is to supply you with optical products designed and built to carry out your specifications with precision.

COLONIAL OPTICAL COMPANY
distributors of BAUSCH & LOMB products

THE SCOPE

Presents

The Nose and Sinuses in Relation to the Eye

by Harold Greeley Noyes, A.B., A.M., M.D. New York City

Many people will come to you in the belief that they have eye trouble. They will complain that they have this or that pain in or around the eyes. When you examine the patient, you will find that he has plus 0.25 cylinder axis ninety, or some such small error. What actually is the matter with him is a disease of nose, throat or sinuses; so it is very necessary for you to have an idea of nasal pathology in relation to the eye. Some people complain that their eyeglasses feel heavy on the nose, or that they cannot bear them on account of pain; in such cases suspect sinuses.

There have been some experiments on the close relation between diseases of the eye and germs coming from the nose. A few years ago, a couple of Italian investigators put various germs in the noses of animals, killed the animals, took their eyes out, studied them under a microscope, and found that large numbers of these germs went into the aqueous (and even the vitreous), proving the very intimate connection of the nose and the eye.

Nose and Eyes Closely Linked

One reason for the passage of disease from the nose to the eye is the direct continuity of the nasal mucous membrane up the lachrymal canal and ducts, and since these are directly continuous with the conjunctiva, when the patient has a cold in his head he also gets conjunctivitis. The germs swim around in the current and even against it. They go directly on to the conjunctiva. (Of course, the individual's body has to be weakened for the germs to take effect.)

Another reason nasal pathology and the eye are closely linked is that the blood supply is so similar. The ophthalmic artery gives off anterior and posterior ethmoidal arteries and, of course, the nerve sensation in the eye (the fifth cranial

nerve) is also the nerve sensation in the nose. Also, the nasal venous plexus drains into the ophthalmic vein, and in that way germs that are playing around in the nose can get to the eye (or close enough to it to damage it), and, of course, this goes on to the cavernous sinus. That is one reason why many pathological conditions of the nasal sinuses are so dangerous.

There are a great many small blood vessels in the conjunctiva. When they become enlarged and congested they are immediately apparent. The reason why we do not have corneal ulcers all the time is that there are no less than five different layers of cells in the epithelium to be nicked away before you get down to where trouble can happen. When you get a cold in the head (or some other infection of the nose), these are some of the things that occur in the eye: tearing, infection of the tear sac, blepharitis (by direct extension), conjunctivitis, also reflex twitching, blinking, burning, scratching, etc. Moreover, you can get neuralgia and severe pains around the eyes, caused by pressure of the middle turbinated bone on the nasal septum. Ordinarily, the middle turbinate may be fairly small, but at times it may swell considerably. If you look in the nose, you will see that the septum is bent way over. If the middle turbinate swells, there is bony pressure against very sensitive membranes, which is bound to be painful. If there is a very slight refractive error, you can be quite certain that nasal trouble is what is causing the pain. If you see that the patient has trouble in his nose, send him to the rhinologist.

Migraine has a different course. It is always on one side; there are light-flashings and "fortification" --- figures or various special signs that the patient will say that his grandfather or grandmother had similar headaches. The sinus

pains are sharp, shooting, and last a little while.

Situated in the back of the nose is the sphenopalatine ganglion. If that ganglion is affected by poisons, resulting inflammation can stir up sensations of pain referred to the eye and nose. In some severe cases, if the patient is treated by an anesthetic applied to the correct spot, the pain in the eye ceases right away.

Ocular Effects on Nasal Pathology

Red lids and an inflamed conjunctiva are often a direct effect on nasal pathology. The germs come directly from the nose to affect the eye; but sometimes the effect is reflex and remote --- like a patient who has flat feet complaining of pains in his knees, not because there is anything wrong with his knees but because the nerve supply of the knees and feet being the same, the nerves coming from the knees respond to the brain with sensations of pain. In the same way, the nose sensations are referred back to the eye.

You get very severe toxic effects in the eye from the poisons generated by germs and germ products in the nose. You can get iritis, retinitis, neuritis, etc. The poisons that circulate in the system complete the cycle from a focus of infection. The point of infection is in the nose, but the effect is shown in the eye. You can also have what we call a metastatic effect. There is pus in the adenoids or tonsils, for example, which circulates through the blood and lodges in the eye, causing choroiditis, which threatens the sight.

You can have pressure effect from large tumors in the nose. The commonest are called polyps. Sometimes they become so big that they fill the whole side of the nose. I have seen surgeons remove some as big as the end of your little finger, about half a dozen at a time. (I remember an old man in India, for whom I did this operation. He came back a year later with just as many.) One result of polyps is swelling (edema) of the lids. When you see a patient whose lids are swollen, that is one of the causes you have to remember. (The swelling does not necessarily come from hair-dyes or poison ivy.) If it lasts for quite a while, it may be that the patient has a terrible tumor in his nose. Also, the globe of the eye may be misplaced.

The orbital plate is very thin, and polyps can push the globe out. If the globe is pushed out, it paralyzes the extrinsic muscles of the eye, leading to very great interference with mobility.

Quite often a patient comes to the eye clinic because he thinks that his trouble is in the eye, or his family doctor, or some one of the general practitioners in the clinic, considers the trouble to be in the eye; but it will turn out that the real difficulty is in the sinuses. You will find in your practice quite a few cases where the pains, weakness of vision, and various other complaints are not due to refractive error or exophoria that comes from an actual eye weakness, but where the health is run down in general because of disease of the nose or sinus. Or you may find that some one sinus is unhealthy, thus affecting the patient's ocular mechanism.

Diseased Sinuses and Ocular Diseases

We will consider how diseased sinuses can cause disease in the eye, or how they sometimes lead you to believe that the trouble is in the eye. You have been taught the anatomy of the eye and orbit and the proximal sinuses and, therefore, only a rough review is necessary here.

In a front view, the frontal sinuses are found right above the root of the nose and above the orbits. In a side view, the frontal sinus would be over the eye. The ethmoid sinuses are right behind the bridge of the nose. There are three or four different cells on each side. There are two sets of them, the anterior and the posterior. The sphenoid sinuses are way back at the junction of the throat and nasal passages. Then there are the antra, at either side, in the cheeks. There are two sphenoids, one on each side. They are just below the pituitary body, so if anything happens to the sphenoid something may have happened to the pituitary body.

We are now getting up to structures that are in the brain. It is not safe to play around with the ethmoid sinuses. For six years I had my office with some osteopaths, and it happens that I heard this story from one of them whose wife was stricken with ethmoid sinus disease. She had the ethmoid scraped on a Saturday and died on the following Monday from meningitis. There is a very thin plate of bone between the

ethmoid sinus and the front of the brain, so the least extension from the ethmoid sinus can cause meningitis and death. Trouble in the sphenoid can do the same.

Common Involvements of the Sinus

The commonest involvement of the sinus that you will run across is in the frontal, because when the patient has a pain in or around the eye he thinks that it is the eye that troubles him. The antrum is almost as commonly involved. Practically every time someone has a cold in the head, the antrum fills up with mucous and serums; and it is remarkable how often these sinuses can cause trouble in the eye. The ethmoids may also be involved very commonly.

Let us review the manner in which these sinuses can affect the system, especially the eye. It is worthwhile to note the age in some of these sinus cases. A child below the age of seven or eight does not have a frontal sinus. The ethmoids develop in children of about three or four. The sphenoids have been found in children of three. The antrum does not develop in children until they are twelve years old. To some extent, you can rule out sinus diseases of certain sorts by the fact that children haven't the sinus at that age.

It is very important, when taking the study of the patient, to ask him when the pain in and around the eye or forehead comes on. If he says that he gets a severe ache in his eye in the morning and then it passes off, you can be pretty sure you are dealing with some sinus condition. On the other hand, in a few cases with muscular difficulty, the patients say that they get up in the morning with a headache and feel better after a while. Ask the patient if the pain feels worse when he bends down. The reason it does in sinus conditions is that the pressure on the sinus is increased when the patient stoops. The way to tell whether he has a sinus condition is to take the little finger and press up and in where the brow overhangs. If the patient has a frontal sinus that is inflamed, he will rise right up from the chair. Another clue in suspecting that the frontal sinus is inflamed is that the upper lid or both will be swoller, especially at the inner upper angle. If

you suspect sinus trouble, that is half diagnosing it.

Patients who have sinus disease and wear nose glasses find that they cannot stand any pressure on the nose. I had an optometrist friend who had quite a long-standing sinusitis. I removed many polyps from his nose. Soon after the inflammation cleared up, he had no trouble from pads pressing the bridge of his nose.

Testing by Trans-illumination

You can test the frontals and antra by means of trans-illumination. Shine the light upward through the frontal and downward for the antrum. But the only way you can tell about the ethmoid and sphenoid is by having an X-ray. If the sinus is full of pus, it will be very dark.

Allergic conditions often cause sinus trouble. In the same way that you can have angioneurotic edema of the skin, you can have angioneurotic sinus. Just like all peculiar allergies, it comes quickly and goes quickly. If you had or have ever seen a case of hives, then you know that it rises very suddenly and goes down very suddenly. It is the same with any allergy.

You may get a rather serious inflammation of the orbit from diseases in the ethmoid. There is only a very thin plate of bone between the ethmoid sinus and the orbit, so that the loose tissue in the orbit can become inflamed and the patient may have cellulitis (an inflammation of the cellular tissue). There may also be an abscess in the orbit or inflammation of the covering of the bone. The orbit is made up of bony walls and around that is thick connective tissue (periosteum) and that, being inflamed, gives rise to periostitis. There will be redness, swelling, and tenderness, and the patient will be sick with a fever. There will appear a dark purple around the eyes. The patient is evidently quite ill.

In the posterior ethmoids you get the same troubles as in the anterior, but, in addition, the optic nerve passes close by on its way from the orbit, and the posterior ethmoids can cause a poisoning of the nerves leading to optic atrophy. You can have an actual shutting off of the nerve.

The sphenoids have an even closer relation to the optic nerve, hence are more liable to
(please turn to page sixteen)

The Experiences of an Optometrist as a Draftee in the U. S. Army

by Private Bernard E. Sedney (Optometrist)

E. V. T. Clinic, Station Hospital - Camp Forrest, Tennessee

Author's Note — This article was written during peace time and authorized by the War Dept. during peace time and my experiences were those of a draftee in a peace time draft program. Many of the rules that affected me undoubtedly will and have been changed either in part or entirely; however, my basic message advising men to "try to get sent to a medical training center and then from there request to be sent to a hospital which has an eye department or a reception center to aid in the examination of draftees coming into the army" still holds true; also the advice to try to get attached to C. A. S. C. (Corp Area Service Command) and keep out of a Division or Combat Unit still holds true.

Prior to Enlistment

The following is written in the hope that the information given herein may be of assistance to other optometrists who may soon be called to serve in the United States Army. I shall, therefore, write directly to those optometrists who are subject to being drafted. Before relating my experiences gained during the last five months in the Army, I wish to emphasize that no one optometrist's experience as a draftee can be used as a criterion for the group and therefore does not tell what other optometrists have undergone nor foretell what you may undergo. There are, however, some generalizations and rulings which influence all, and the knowledge of which may be of value to you.

By repeated studies of the information gained from my draft board, I concluded that I would be called around July, 1941. Of course I was primarily interested in working in an Eye Clinic after I was drafted, and I therefore conferred with the Army physicians residing in the region in which I lived in an attempt to learn if there was anything I could do before entering the Army that would aid me in obtaining such a post. They informed me that there was not. However, they said, if I was extremely anxious to work in an Eye Clinic, and since there will probably be more optometrists drafted than there will be Eye Clinics in which to place them, it would be wise to enlist early in the defense program before these limited posts were all taken. I was overly anxious to obtain one of these relatively scarce posts and volunteered under the Selective Service Act in the latter part of April.

At the Induction Center

Before being sent to a training camp, the men

are first sent to an Induction Camp to be given equipment, immunization injections and classified. The Army classifies men according to their past occupation and training, but as you may expect, because of the immensity of the problems involved, and because for many tasks there are more men classified than there are jobs, a great number of draftees cannot be placed in jobs akin to their civilian qualifications. The most important advice I can give you is to *try to get sent directly to a hospital which has an eye department*. Don't worry about being sent as an optometrist; even if you are sent there to work as an orderly you would stand a very good chance of being assigned to the Eye Department. Hospital officers do not waste the potentialities of their men if it is at all possible to use them to an advantage.

During the few days I spent at the Induction Center I spoke to the officer in charge and he told me that after I got to my training center I should apply for transfer to the hospital; of course I did not know at the time, because of a War Department order, that I was going to encounter a great amount of difficulty in getting a transfer. The following will explain.

At the Training Camp

After a few days in the Induction Center we were shipped to our training camp; I was assigned to the Infantry. Five days later I applied for transfer to the hospital. The application was accepted and my transfer papers were officially started through the necessary chain of command.

The Station Hospital of any given camp is not a part of the combat division which composes the major part of an Army Camp, but is a separate unit and the soldiers attached to it

are known as Corps Area Service Command (C.A.S.C.) troops. The chances are slight that any draftee shipped to a training camp will be attached to C.A.S.C. but rather will be sent into the combat division which does not operate the Station Hospital. To my dismay, I learned that the War Department had issued a bulletin, the essence of which is as follows: No draftee can be transferred out of a division until he had completed four months of training, except for the convenience of the government. Most of the officers who had to sign my transfer stated that it was for the "convenience of the government," and approved it; one thought otherwise and I therefore had to wait the full four months before the transfer could be effected. It is very difficult to obtain a transfer out of a division. Try to be sent to a medical training center and then from there request to be sent to a hospital which has an eye department or to a reception center to aid in the examination of men draftees coming into the Army.

It is not sufficient to be assigned to the Medical Department. The Medical Department is a great organization composed of many kinds of units of different functions. Every division has its own medical regiment which concerns itself with the evacuation of its sick and wounded. They do not render optometric care; such patients are referred to the Station Hospital. I have spent two months with a Division's Medical Regiment and soon learned that being an optometrist was of no value there since they did nothing in which our training was especially applicable. I am now transferred to the Station Hospital and working in the Eye Department. The only other advice in this connection that I can suggest is, if you are not sent to a Station Hospital and find yourself affected by the same ruling that hindered me, request that you be assigned to the Station Hospital on special duty until the transfer can be cleared through.

Concerning the Optometrists' Rating in Military Service

As you may know, although the navy has given a few optometrists the rating of Ensign (and these men are working as optometrists) the Army does not give them a commission;

as far as I can ascertain there is no prospect of this regulation being changed. The rating you may attain as a non-commissioned officer or specialist depends upon your performances as a technician and soldier. According to information received from the War Department, optometrists may be given the rank of Technical Sergeant; that does not mean, however, that you will be given it; you will have to earn it. Our officers are more than willing to promptly give ratings to those who deserve them. I feel fortunate in having been assigned to the Eye Department here, and I am treated splendidly.

In conclusion, to the best of my knowledge you will not be given any more choice as to your placement whether you volunteer or wait to be called. I sincerely hope that what I have written will be of aid to some of you.

FIRST IN MULTIFOCAL LENS DEVELOPMENT UNIVIS

First with the perfectly straight-top bifocal segment . . . **First** with commercially feasible corrected curves . . . **First** with controlled reading centers . . . **First** with the angled segment-top . . . **First** with a practicable 3-Way Lens . . . **First** with a practical means of equalizing vertical prismatic effects at the reading depth . . . **First** with a lenticular cataract bifocal . . . **First** with an all-glass telescopic lens . . . **First**, and still the **only** manufacturer with the thin gray segment-edge . . . **First**, and still the **only** ophthalmic manufacturer to use Newton's Rings Test in bifocal processing. These are but a few of the reasons why Univis Lenses help keep eyes young at bifocal age . . . Why your patients are always better satisfied with Univis.

Wilson & Halford Optical Co.
387 Washington Street Boston, Mass.
Telephone HUBbard 2770

Heterophoria Testing With Trial Case Prisms

by Clinton L. Wilson, Jr. '42

This article is not being written with the intention of bringing forth a new technique of phoria testing, but rather as a means for the student to practice the measuring of phorias without involving too much expense. The principle involved is but a modification of the principle behind the Stevens' Phorometer.

In the Stevens' Phorometer we have two 5 prism dioptres so arranged that by turning a central dial we can rotate the two prisms in the same direction and vary the prismatic effect in various meridians. In one position the Stevens' Phorometer gives 5 prism dioptres base up on the right eye and 5 prism dioptres base down on the left eye; this is equivalent, in effect, to 10 prism dioptres of vertical prism. This is considered the same as the dissociating prism in the technique by Savage. Now, by turning the central dial we cause each of the two prisms to be inclined at an angle in respect to the primary position. We have, therefore, the resultant effect of some value less 10 prism dioptres in the vertical, and a horizontal effect of base in or base out, depending on which way the dial is turned. The Stevens' device is graduated on its rim in such a way as to read off this horizontal effect in prism diopters of esophoria or exophoria.

The above explanation holds true also for the vertical tests. By placing the prisms so as to give a dissociating effect of 10 prism dioptres base in, we can rotate the prisms to get a base up or base down effect which is read on the dial in prism diopters of right or left hyperphoria.

In the procedure that I am about to explain we use, instead of the Risley Prisms or the Stevens' device, two prisms of a fairly high degree, which may or may not be equal.

The only equipment necessary is a trial frame, 3 or 4 trial case prisms of at least 5 prism dioptres (preferably all unequal) and some object of regard such as a small light source or letters cut from a test chart.

The procedure of lateral phorias is to place

the prisms in the trial frame, one base up and the other base down. Be sure that the base-apex lines of the two prisms coincide with the vertical meridian of the trial frame.

One of these prisms is to be left in this position as the principal factor of dissociation; the other prism is to be rotated and is to be called, therefore, the measuring prism. Both prisms in the initial position contribute to dissociation. For purposes of explanation we will say that the principal dissociating prism is 6 prism dioptres base up on the left eye, and the measuring prism is 5 prism dioptres base down on the right eye.

As we rotate the 5 prism dioptres away from its vertical position we decrease the vertical prismatic effect and bring about a horizontal effect. This horizontal prismatic effect is used to measure the esophoria or exophoria.

The procedure for vertical phorias is to dissociate by placing two prisms in the trial frame in a base in position. Now, either of these prisms is rotated to obtain a vertical prismatic effect which is used to measure the degree of right or left hyperphoria.

This constitutes the actual procedure; the following are the necessary preliminaries:

First, decide on one or two arbitrary prisms to be used for measuring. Then, using the value of the prism you have chosen, make a table showing the effect of the prism as it is rotated off the primary position of base-apex line.

For example, suppose you intend to use a 5 prism dioptres for measuring, and 5 degrees intervals, the table would appear as follows:

(please turn to page ten)

Your blood may save a life. See E. Albert Glickman of the senior class for details of how you can help.

Thru the Editor's Eyes

Editorial Staff

Editor-in-Chief: JOSEPH M. ALEO

Assistant Editor: DAVID G. ESSEX

Associate Editors: STEWART MACKENZIE
HAROLD CALDERONE
ERNEST MCVAY

Business Manager: LOUIS UPHAM

News Editors: HENRY FINE '42
JOHN E. QUINN
PAUL N. GATES
ROBERT LIPPIN
ARTHUR VEANER
ROBERT J. SAUL
HERBERT IVENTASH,
Omega Epsilon Phi
SIDNEY NEWMAN,
Pi Omicron Sigma

Sports Editor: MARSHALL V. MARGOLSKEE

Circulation Managers: JOSEPH MITTELMAN
CLINTON WILSON

Reporters: JANET MECHANIC
STANLEY MACGREGGILL, JR.

Contributing Editors: ARTHUR HARRIS, A. B.
JEROME RUTBERG
RALPH W. BARNARD, JR.
CONRAD A. CADORET

Adviser: MRS. WILSON

The Editor Says

The great need for graduate Optometrists throughout the country is a fact that has been brought to the attention of schools and colleges teaching Optometry. In order to meet this emergency, these schools and colleges have adopted changes in program that will enable the present and future Optometry students to complete the four year course in considerably less time.

Here at M.S.O. the final semester of this term began January 19, 1942 and will continue without interruption for holidays or Spring recess and will be completed April 30, 1942. Wednesday, Thursday, and Friday of the last week the final examinations will be given. There will be a recess of one week after which the next school term will begin.

The four year program has been changed to a trimester basis so that the entire course may be covered in three years. This program is to continue through the entire courses, summers included, for the duration. The present classes will complete their four-year courses as follows:

Seniors. . . . April 30, 1942
Juniors. . . . January, 1943
Sophomores . . September, 1943
Freshmen. . . May, 1944

The actual number of school hours has been altered only slightly and no subject has been dropped from the curriculum so that the course shall be complete in every respect.

The State Board Examination Committees of the various states have been consulted and many have consented to schedule their examinations to conform with our program and favorable replies are anticipated from those who have not yet rendered decisions. The Massachusetts State Board is, in addition, working for a change in ruling which will allow those, who may, under this plan, graduate before they have reached the age of twenty-one, to participate in the examinations and, if possible, receive their certificates. It may be that the certificates of these persons will be withheld until they attain the age of twenty-one.

Future Men of Optometry are anxious to help win this great war and under this plan they are able, before participating actively, to better prepare themselves for the period of peace which must eventually follow. This is the objective of the entire alteration.

Heterophoria Testing With Trial Case Prisms

(continued from page eight)

Degrees from B. A. line	Value of Measuring prism	Value of Dissociating prism	
	Dissociation	Measuring	Degrees
0 degrees	. 0	5.00 prism dioptres	90 degrees
5 degrees	.44 prism dioptres	4.98 prism dioptres	85 degrees
10 degrees	.87 prism dioptres	4.92 prism dioptres	80 degrees
15 degrees	1.29 prism dioptres	4.83 prism dioptres	75 degrees
20 degrees	1.71 prism dioptres	4.70 prism dioptres	70 degrees
25 degrees	2.11 prism dioptres	4.53 prism dioptres	65 degrees
30 degrees	2.50 prism dioptres	4.33 prism dioptres	60 degrees
35 degrees	2.87 prism dioptres	4.10 prism dioptres	55 degrees
40 degrees	3.21 prism dioptres	3.83 prism dioptres	50 degrees
45 degrees	3.54 prism dioptres	3.54 prism dioptres	45 degrees

Naturally, as we turn the prisms, the quantity of prismatic effect for measuring will increase; and simultaneously the prismatic effect for dissociation will decrease. If the loss of dissociating prism is so great that the patient can obtain single binocular vision, it will be necessary to introduce a stronger prism before the eye which is concerned with dissociation.

You may find it convenient to make a table in .5 prism dioptres intervals, showing what the angular measure will be for a corresponding value, such as the table which follows:

Measuring Prism	Degrees from B. A. line
. 0	0.
.50 prism dioptres	5.75 degrees
1.00 prism dioptres	11.50 degrees
1.50 prism dioptres	17.50 degrees
2.00 prism dioptres	23.50 degrees
2.50 prism dioptres	30. degrees
3.00 prism dioptres	37. degrees
3.50 prism dioptres	44.50 degrees
4.00 prism dioptres	53.25 degrees
4.50 prism dioptres	64.25 degrees
5.00 prism dioptres	90. degrees

Equipped with these tables and the axis notation on the trial frame it is possible to do heterophoria tests with very little trouble.

There will be, naturally, a few problems en-

countered in this procedure, as compared with the accepted methods; but I'm sure that with a little practice you can perform these phoria tests with a minimum of difficulty.

ODE TO A PAIR OF SPECS

• • •

*Ah, come and sit upon my nose
And make my vision clear;
Hold my perception in your grasp,
One arm around each ear.*

*Thus tie my hearing to my sight,
And may they both be keen,
That I may live and live again
The things I've heard and seen.*

*And as the day begins to wane,
And I begin to doze,
Relax your hold upon my ears
And slide down on my nose.*

*So thus complete your wide embrace ---
I ask you nothing more:
I only hope you hold your own
When I begin to snore.*

—FLORENCE JANSSON.

From "Country Gentleman"

Senior Segments

by Henry Fine

A month of war has rolled by and it can not be said that anybody has profited thereby unless in a crass material way. As in all wars, there is much to disgust the thinking observer or participant but among the most disgusting are those newsmen, both radio and paper, who have taken unto themselves an attitude sadly reminiscent of the German Propaganda Bureau. We have reference to those pseudo-anthropologist who in their talks and columns constantly allude to the Japanese as "little, slant-eyed, yellow men"; as "little slant-eyed monkey men", etc. ad infinitum.

We object strenuously to such an attitude for it is exactly such attitudes that America is allegedly fighting. Part and parcel of the Nazi gospel has been and is the theory of the superior and the inferior race, the inferior race supposedly being inferior through the absence of all virtues, physical, mental, and spiritual, that the superior race "naturally" has as part of its divine right.

This column doesn't like divine rights whether claimed by persons, political parties, or entire nations and can not stand by idly while not-too-learned men sneer and scoff at the enemy, not in an intelligent manner, but at physical and mental characteristics which true science (Boaz, et al.) teaches are the natural result of a particular environment through thousand of years.

It is to be remembered that foreign fascism can not be *constructively* fought with a native fascism no matter how attractive the native fascism may be made to appear.

And now to the senior class which reports that:

It was appalled by the untimely appearance of the mid-year exams. The class softly sighed and muttered "NICHEVO" as it attempted ably to select a writer of the Dastoievsky type to express "the futility of it all". The class also sadly prefers the information that during the Xmas vacation, the U. S. Post Office accepted

all post cards unless they contained information of vital importance to the enemy.

That during the same Xmas vacation Essex, Berg, Fine, and Calderone were in the employ of the U. S. Post Office and would gladly have speeded the above mentioned post cards.

That Iventash is now the proud owner of a 1932 Pontiac which uses one gallon of oil to one of gasoline. We are assured by a correspondent from Providence that the Pontiac would look better as a part of a torpedo.

That Newman and Savey spent their vacation in Jersey investigating the mosquito situation. They report that despite the intense cold, the small bombers failed to operate on only two days, Xmas and New Year's Day. The two gentlemen from the state which said "NO" are attempting to get the winged hordes to refrain on July 4th also.

That Maria Armanda Font spent a happy holiday in the Biggest City of Them All. She didn't go to the conga-rhumba joints in the Village preferring to wait for the original in P. R.

That Fishman tooted \$17.00 worth on New Year's Eve, at the Raimor ballroom... --- Falino copied notes... --- Otis nursed a cold as he deftly poured rum and less worthy drinks... --- Rodman graced the hitherto humble town of Holyoke to his financial gain and to the yokels' delight... --- Wasserman called us several times -- unsuccessfully... --- Janet mailed us \$4.20 for which we are thankful... --- Garfi plotted to beat the draft-board for another few months... --- Jacobs retained his position as tire expert.

Acme of asinity: Midyear exams which came as a surprise. Enough to restore the writer's faith in the bogeyman.

Show of the month: "Porgy and Bess". Sublime!

Picture of the month: "Six Gun Gold" at the Stuart. --- wonderful for an escape. --- at least thirteen bullets from each six-shooter without reloading.

Book of the month: "Darrow" by Irving Stone.
(please turn to page thirteen)

Junior Jests

by Quinn and Gates

We realize that by the time this reaches the eyes of our readers, exams will be a month behind us, but nevertheless, that subject still seems to remain the forerunner of all others. Admitting that we've all had just about enough of the serious side of exams, we'll see what we can do to bring out what might be called the humorous side.

For the benefit of the sophomore Anatomy class, get a load of this. One of the higher visual centers of the brain was misnamed "The Bi-cuspid Placenta". Another one of the misnomers for the same structure was the "Maxillary Gyrus".

A short while before exams, we heard one member of a small study group trying to define Absolute Magnification. There were a great deal of excellent definitions forwarded, but the one we liked best was a little tricky; and because of its originality, we thought perhaps you'd like to hear it. The definition is as follow: Absolute magnification is the use of a lens to place the image where the object was, after the lens is removed. It's a good trick, if you can do it.

Perhaps you've heard something about the limited accommodative abilities of a person, age 60. As a matter of fact, problems have been compiled which wrack our brains as to how far a man at that age has to stand from a concave mirror in order to shave properly. Bob Rosenthal has only one answer. "What would a man at that age be shaving for, anyway?". Well, Bob, these problems are done on the assumption that these fellows are very good friends of the Widder Jones.

Just before Christmas vacation, we were getting our final "Good Luck" from one of the instructors, and he sincerely hoped that with the oncoming exams, we'd do our very best to get at least one "A". Once again Bob was right on the ball, "We'll get '1A' all right, from Uncle Sam anyway." And that is probably more truth than fiction.

We're actually beginning to think that Jerry Rutberg is a "Killer-diller". At least that's the

impression we've got from the feminine company he keeps. And this little story, by the way, involves our ace reporter, Pearly Gates. It seems that Pearly got to the bottom of the school stairs before anyone else one afternoon and was confronted by a very comely young brunette who wondered as to Jerry's whereabouts. Before Pearly got a chance to take a breath, the young lady said, "Are you the Professor I've been hearing so much about lately?" Pearly said, "I don't know, which one do you mean?", and all he could get out of her was, "Oh, I'm not sure, but I've been hearing an awful lot about you,". So, from now now on, perhaps we'd better be a little more careful as to how we address Dr. Gates. And as for Jerry, no fair telling tales out of school.

Into the nickname department for a second, we find that Bernie Issockson's nickname has been phonetically rounded off to Bunny. We don't know why, but we have our suspicions.

Sid Tailor has also adopted a nickname. Yes, they call him "Willie" now.

For some time we've been wondering what all the boys admire when Sid Schectman walks into the class room in the morning. Is it a new hat? New hat band? Let's hear about it Sid! Speaking of new hats, Lou Vaniotis and Paul Thornton both have brand new toppers, and would like to sell their old ones (Cheap).

If you ever get the urge to ask a real important question, and you can't attract the attention of the instructor, just nudge Joe Craven, and he'll fix things up for you. Eddie Calmus had a question one day, and after trying for over ten minutes to attract attention, Joe promptly shouted, "Calmus has a question.". Eddie, by the way, was taken care of immediately.

We wish someone would shadow Irv Fradkin some night. We've got our suspicions that he is courting a manicurist. At any rate, he was sporting a set of polished fingernails the other day.

We asked for an answer in regards to the
(please turn to page thirteen)

Soph Soap

by Arthur Yeaner and Robert Lippin

The old army calls! Who was it who put up the big picture of the familiar pointing finger? It was labeled "Uncle Sam wants you Optometry students." and it caused a cold chill to run up and down the spinous processes of our lumbar vertebrae. Lenny Cohen was the only one with not a trace of patriotism. He has flat feet!

What an army M.S.O. could put in the field! Why, the very sight of one-hundred-seventy stalwart Optometry men would probably scare the enemy so that they would never recover. The name of this disgusting battalion could be "The Amalgamated Practitioners of Modern Retinoscopy and Ophthalmoscopy of the Massachusetts School of Optometry, Inc.". The slogan would be "Don't shoot 'till you see the slants of their eyes." As commander-in-chief of the gallant "Boylston Street Boys" would be Major General Ralph H. Green who would confound the enemy with the "clear as mud" quotations. (We can just see Dr. Green sitting on a little white horse twirling his gold watch chain shouting, "Give 'em the subjective fog, boys. Give 'em the fog.") The aroused Dr. Cline, mustache quivering with the power and majesty of his mighty voice, would hurl Greek omegas and alphas at the foe. The Heavy Tank Corps would be generaled by that hard-hitting man of action, Dr. Namias. Pity the poor unfortunate falling into the hands of such an array.

Dr. Victor would be in charge of all vile-smelling chemicals and discipline. He would induct the famous Fader boys and Goldenberg into his special M. P. patrol and no sabotage could take place because the Victor anti-crib system would be employed. All their ethyl alcohol, tri isopropylmetebenzene-2, and yo-yo's would be confiscated. No dead bodies would be allowed on the battlefield so the ground would not be dirtied and a mess left for the little man to clean up, and food would be rationed so you couldn't eat on the battlefield and get crumbs on the floor.

Dr. Spritz could patch up all the wounded

but there wouldn't be much work because all students, excluding Amy (?) are supermen.

Jawn Reardon will make nitro-glycerin soup and feed it to all willing soldiers who want to blow their brains out. All he has to do is find a person with brains.

Yorra's Transportation Service will supply the Panzers --- a hard-hitting, well-armed bunch of "panzers". Schlosberg will blow reveille, mess, charge, and finally... --- VICTORY.

Amy will flutter around as an angle of mercy administering first aid in the form of that free-flowing golden beverage --- and formaldehyde to those who don't drink.

It's too bad that Ruby can't be there too, as the enemy.

Any resemblance to actual persons is purely intentional.

-- Senior Segments

(continued from page eleven)

Advice to the lovelorn: If you don't like ours, try Dorothy Dix.

Advice to others: See Glickman.

Advice to self: Try to forget that "*Reductio ad absurdum*" applies to practically everything.

-- Junior Jests

(continued from page twelve)

steak dinner that Bill Morin was considering for the boys of Gamma Gamma Gamma, and now we have it. The members very patriotically starved one night and used the sawbuck as a down payment on a defense bond. Three cheers!

Time is up now, but just a reminder --- Are you still following your post-semester resolutions?

The Bunch

page thirteen

Freshman Foibles

by Irving Greenblat

Fellow students --- one semester has been completed. There now - it didn't hurt at all - did it? It was a quiet uneventful semester. No goldfish swallowing, although Ross tried to down a Lumbricus Terrestris. Smith had a baby. Epstein had a mustache, Smith's has grown. Epstein's hasn't.

Due to summer sessions, we will be seniors in less time than it takes to say *Perca flavescens* (they tell me) but these summer sessions offer a new problem. As reporters of the Freshman Class it is our duty to pry into the private lives of its members and make public a cross section of opinions.

Our first interview is with draft-dodger, "Moishe" MacCarthy who is being sought by Local Draft Board No. 48 of Miami, Florida. "Moishe" MacCarthy is now posing under the alias of Oscar Epstein and, having disguised himself with a pair of "cheeters", pretends he is a normal M. S. O. student. Says Moishe concerning summer courses, "Youse guys have been cramping my style with your winter clothes but just wait 'till summer rolls around and I take my green sharkskin pants out of formaldehyde and show youse Yankees how a well dressed southern colonel looks. Fetch me a mint julip will youse Margeret?"

Entirely different was Mr. Victor's reaction to these summer courses. Altho he declined to make a statement, I have been informed by a reliable source that Mr. Victor, the "sharper of City Point", will have less time in which to show his leopard-skin bathing trunks. Formerly all he had to do was flex his muscles and girls would swoon for miles around.

"Four snipes to a butt" Miller is pleased with the new program. Where else could he bum cigarettes all summer long.

We're not going to say anything about Wolfe this month because last month we referred to his activities with the women and
(please turn to page fifteen)

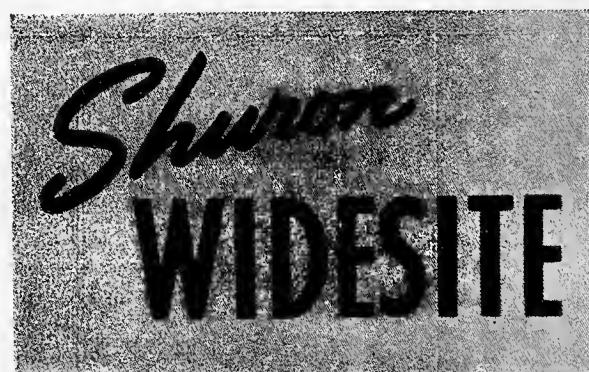


LABORATORY CONTROL insures

Quality Beyond Question

Every step in the manufacture of Shuron WIDESITE Lenses is under the watchful eye of the Shuron scientific laboratory. This continuous control of operations is your guarantee of finest quality lenses for every prescription marked WIDESITE.

Specify WIDESITE from your Independent Distributor.



Pi Omicron Sigma

Sid Newman



DR. R. H. GREEN, Grand Chancellor

SIDNEY NEWMAN, Chancellor

STEWART MACKENZIE, Vice Chancellor

GEORGE M. COHEN, Scribe

PERRY SAVOV, Treasurer

ARTHUR WEISMAN, Sergeant-at-Arms

Π Ο Σ

Symbolic of fraternalism and interfraternalism, both organizations have proposed one article under two insigniae. Since at this time of year the activities of both fraternities coincide, that is, the "Inter Fraternity Ball". Thus we put away our sling shots and tear down all barriers between them.

Our main topic is that of the Interfraternity 'Eye' Ball. At present a committee from each organization is planning to make this the top social event of the year. The time, place and dress are yet unknown but in due time all information shall be disclosed by an interfraternity communiqué. Although the name implies a combined dance of the two male fraternities of M.S.O. --- we are not without regard for Epsilon

-- Freshman Foibles

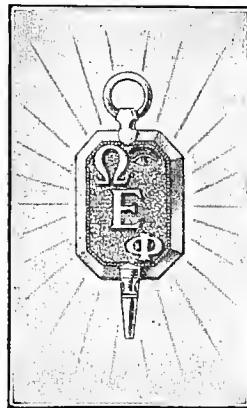
(continued from page fourteen)

it got him in trouble. It seems that Woolfe's mother didn't know that "little Irving" had anything to do with girls. Immediately after reading last month's Scope, she had daddy Woolfe take sonny aside and tell him the facts of life. "Young" Woolfe (which is his name --- not his hobby) now has a new outlook on life. Only 400 words and nothing more to write about, having insulted everyone we have dared to insult. They'll have to fill up the rest of the page with an advertisement.

Greenblat.

Omega Epsilon Phi

Herbert Inventash



President

HENRY FINE

Vice President

ROBERT RODMAN

Recording Secretary

STANLEY MACGREGGILL

Corresponding Secretary

DAVID ESSEN

Treasurer

CLINTON WILSON

Omicron Sigma, the sorority, for they too are joining in this great event.

So don't forget, the entire student body and friends are invited to this social affair.

Other events forecasted by each fraternity are those of Omega Epsilon Phi, who are planning their initiation some time in February and holding elections of new officers for the coming year late in the month of March.

Likewise Pi Omicron Sigma will hold elections late in March followed by its 29th annual banquet.

Thus with a handshake across the doors of interfraternalism we say, "REMEMBER THE EYE BALL."

*Woman without her man ... is lost.
Woman --- without her, man is lost.*

When you lick a defense stamp to place it in your folder, think of the pasteing you are giving some Jap.

Sport Eye-Tems

by Marshall V. Margolstee

"Have You Heard?"

That due to the Christmas vacation and the semester finals, activities on the sports program were forced to come to a complete halt for approximately one month. However, now that the examinations have become but memories, (and oh, such memories), we can again begin to concern ourselves with the various athletic interests of the student body. Because of the present war, the scholastic year has been shortened and thus it is of outmost importance that each student devote more of his time to his studies and clinical work. If some time can be found for basketball games, then they will be played, but the present schedule will undoubtedly have to be cut short and altered.

The Nose and Sinuses in Relation to the Eye

(continued from page five)

cause trouble. Usually you find some dimness of vision (from 20/40 down to fingers at a few feet), and you cannot see anything in the fundus. Then you begin to think that there must be something behind the globe that is causing a loss of vision. If there is a central scotoma and an enlarged blind spot, it indicates retro-bulbar neuritis.

The antrum is frequently involved. There may be a swelling of the lower lid, and when that gets very bad, it may push the eye upward. The patient may get cellulitis when the infection breaks through into the orbit. The antrum may be affected by the common cold which is, as near as we know, caused by a filterable virus (some living organism that passes through a

That the date for the next basketball game will be posted soon.

That the professional and amateur hockey games at the Boston Gardens are being very well attended by M.S.O ice enthusiasts. Any information which you would like to obtain concerning either league will gladly be presented to you by those two rabid hockey fans of the senior class, Rice and Weisman.

That we hope to have more sport eye-tems for you next time.

KEEP 'EM FLYING!

M. "Vic" M.

Berkefeld filter. With the ultra-microscope there is a good chance of discovering more about such an ultra-microscopic virus.)

Coryza (the common cold) is often the cause of eye pathology. It may leave foci of infection causing retinitis, iritis, neuritis, and various other conditions in the eye by the germs that are swimming around. Or it may cause a paralysis of the eye muscles by the toxins that are circulating from the sinuses or by direct extension from the sinus.

Summary

1. Many eye complaints are due to pathology in nose, throat, or sinuses.
2. Anatomical and physiological connections (here outlined) account for the common damaging of the eye.
3. Some hints are given to help the practitioner decide whether the case should be referred to another specialist.

67 Park Avenue.

The Dead-line

News items intended for publication in the Scope must reach this office not later than the

tenth of the month, if intended for the following month's issue. Those arriving after the tenth may be held over by us until the following month.



